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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,529	09/27/2000	Yannick Albertone	AD6649 US NA	6969

23906 7590 07/01/2003

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EXAMINER

BOYD, JENNIFER A

ART UNIT PAPER NUMBER

1771

DATE MAILED: 07/01/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/670,529

Examiner

Jennifer A Boyd

Applicant(s)

ALBERTONE ET AL.

Art Unit

1771

-- *Th MAILING DATE of this communication appears on the cover sheet with the correspond nce address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-9 and 11-21 is/are pending in the application.
- 4a) Of the above claim(s) 12-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2,4-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Response to Amendment*

1. The Applicant's Amendments and Accompanying Remarks, filed January 17, 2003, have been entered as Paper No. 8 and have been carefully considered. Claims 1, 2, 7, 11 and 12 have been amended, claims 3 and 10 have been cancelled, claims 13 – 21 are withdrawn and claims 1 – 2, 4 – 9 and 11 – 12 are pending. The Examiner withdraws the objections to the oath/declaration and claims 1 – 12 as set forth in paragraphs 7 – 8 of Paper No. 6. The Examiner withdraws the 35 U.S.C. 112, 2<sup>nd</sup> paragraph rejection of claims 1 – 12 as set forth in paragraphs 9 – 16 of Paper No. 6. Despite these advances, the invention as currently claimed is not found to be patentable for reasons herein below.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 2, 4 – 9 and 11 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller (US 5,532,053) in view of Beavers et al. (US 4,939,009).

Mueller is directed to a high moisture transmission medical film.

As to claim 1, Mueller teaches a laminate film that comprises at least one layer formed from a first polyetherester copolymer and a second layer which can consist of an ethylene-vinyl acetate copolymer (Abstract). The layer formed from a polyetherester is equated to the

Art Unit: 1771

Applicant's "polyetherester layer" and the second layer is equated to Applicant's "tie layer".

Mueller notes that the laminate film can be bonded to one or more layers of polyesters, polyolefins, polyamides and non-woven fabrics (Abstract). For example, the laminate film may have a third layer, equated to Applicant's "moisture vapor control layer", formed from a blend of an ethylene-maleic anhydride modified polyolefin copolymer (column 4, lines 3 – 12). In this embodiment, the first layer, or "polyetherester layer" is positioned between the third layer, or "moisture vapor control layer" and second layer, or "tie layer". Mueller teaches that the laminate film is treated along one or both opposed, longitudinally extending surfaces, depending on whether it will be bonded to one or two non-woven materials (column 7, lines 47 – 51).

Mueller fails to teach that the second layer, or "tie layer", is situated between the "copolyetherester layer" and the third layer, or "moisture vapor control layer".

Beavers teaches a multilayered sheet or films with excellent adhesion. Beaver teaches that the laminate comprises a layer of copolyetherester bonded to a layer of polyolefin, equated to Applicant's "moisture vapor control layer", by means of a "tie layer" of a copolymer of ethylene and at least one other unsaturated monomer (Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange the second layer, or "tie layer", between the first layer, or "copolyetherester layer" and the third layer, or "moisture vapor control layer" motivated by the desire to have a laminate with excellent adhesion since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Art Unit: 1771

As to claim 2, Mueller teaches that the laminate film may have a third layer, equated to Applicant's "moisture vapor control layer", formed from a blend of an ethylene-maleic anhydride modified *polyolefin* copolymer (column 4, lines 3 – 12).

As to claims 1, 4 – 5 and 8, Mueller teaches that the laminate film may have any desired thickness and any desired width. It is preferred that the overall thickness is about 1 mil or less (column 4, lines 60 – 65). Mueller in view of Beavers fails to disclose the tie layer comprises 30 to 90 weight percent ethylene co-polymer units and from about 10 to 70 weight percent vinyl acetate co-monomer units as required by claim 1, the moisture vapor control layer has a thickness of 1 to 5  $\mu\text{m}$  as required by claim 4, the copolyetherester layer is from about 12 to 30  $\mu\text{m}$  and the thickness of the tie layer is about 1 to 5  $\mu\text{m}$  as required by claim 5 and the tie layer comprises 67 – 77 weight percent ethylene co-monomer and 23 – 33 weight percent vinyl acetate co-monomer as required by claim 8. It should be noted that thickness and percentage of ethylene co-monomer and vinyl acetate co-monomer is a result effective variable. For example, as the thickness increases, the material becomes less flexible and more durable. As the weight percentage of ethylene units increase, the tie layer will assume more properties of ethylene. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create 30 to 90 weight percent ethylene co-polymer units and from about 10 to 70 weight percent vinyl acetate co-monomer units as required by claim 1, the moisture vapor control layer has a thickness of 1 to 5  $\mu\text{m}$  as required by claim 4, the copolyetherester layer is from about 12 to 30  $\mu\text{m}$  and the thickness of the tie layer is about 1 to 5  $\mu\text{m}$  as required by claim 5 and the tie layer comprises 67 – 77 weight percent ethylene co-monomer and 23 – 33 weight percent vinyl acetate co-monomer as required by claim 8 since it has been held that discovering

Art Unit: 1771

an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to optimize the thickness of the layers and level of ethylene and acetate in the tie layer to have an effectively flexible and strong laminate with the desired properties.

As to claim 6, Mueller teaches that the non-woven materials can be a polyolefin (column 7, lines 28 – 33) such as polypropylene or polyethylene.

As to claim 7, although Mueller does not explicitly teach the claimed bond strength of at least 1 N/m, it would have been obvious to one of ordinary skill in the art to optimize the bond strength through the process of routine experimentation through such means as the selection of the components in the tie layer, process parameters, etc., in order to arrive at a strong material since these are known to be result effective variables.

As to claim 9, it should be noted that Mueller does not include a weight percentage composition of the copolyetherester layer but the Mueller implies that the layer is purely copolyetherester, therefore, it would meet the Applicant's requirements of 90% weight percent or higher.

As to claim 12, Mueller teaches that one or both of the non-woven materials used as substrates can be subjected to a corona treatment, or Applicant's "primer" (column 7, lines 40 – 50). It should be noted that Mueller teaches that the nonwoven material is a polyolefin but does not include a weight percentage, therefore, the purely polyolefin containing material implied by Mueller would meet the Applicant's requirements.

As to claims 1 and 11, although Mueller in view of Beavers et al. do not explicitly teach the claimed MVTR inequality and ratio, it is reasonable to presume that the MVTR is inherent to

Art Unit: 1771

the laminate structure of Mueller in view of Beavers et al.. Support for said presumption is found in the use of like materials and the use of like processes which would result in claimed MVTR inequality and ratio. The burden is upon Applicant to prove otherwise. Note *In re Fitzgerald* 205 USPQ 495. In addition, the presently claimed property of MVTR inequality and ratio would obviously have been present once the Mueller in view of Beavers et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1 – 2, 4 – 9 and 11 - 12 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

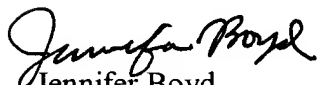
Art Unit: 1771

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 703-305-7082. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Jennifer Boyd  
June 30, 2003

